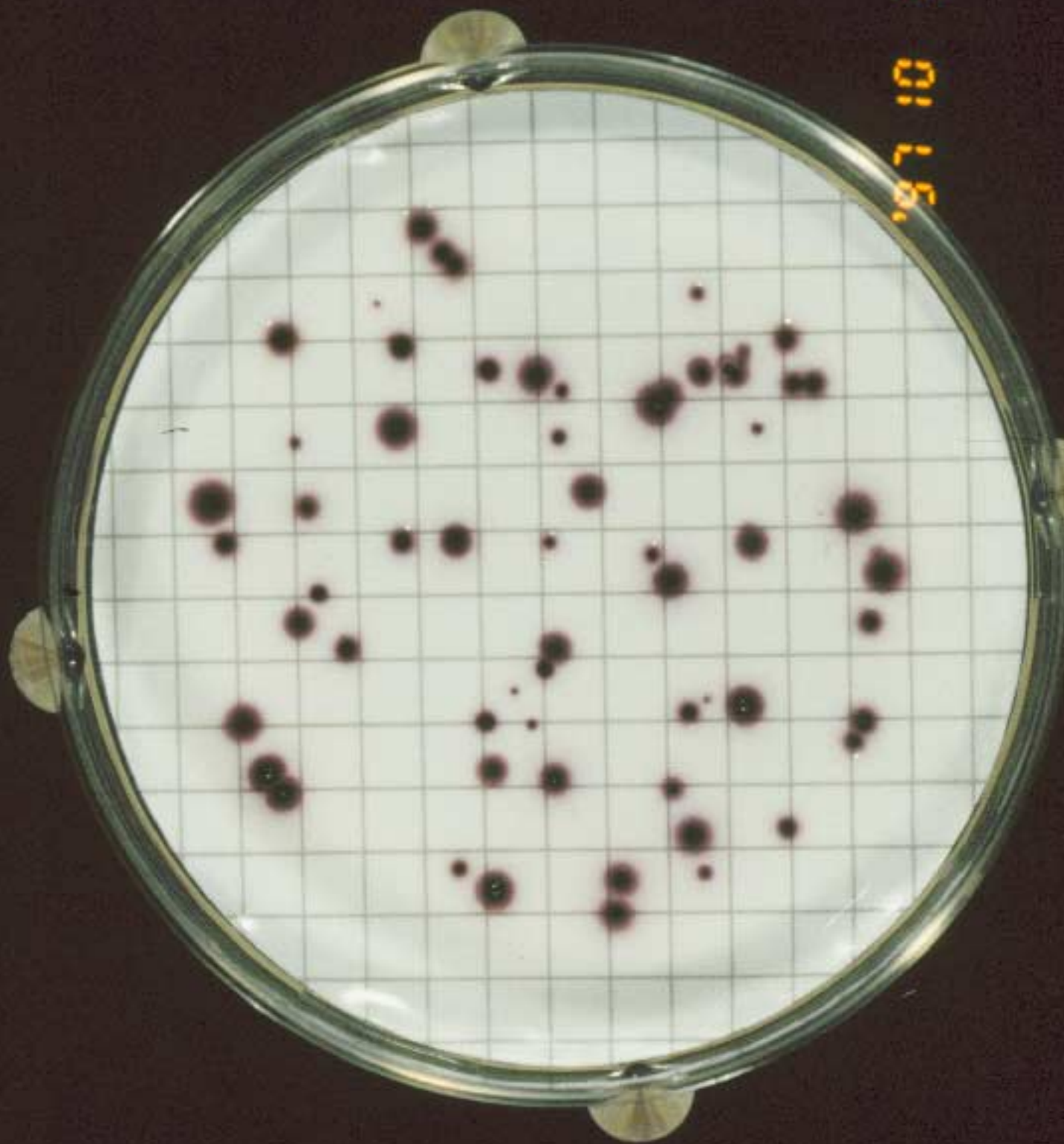
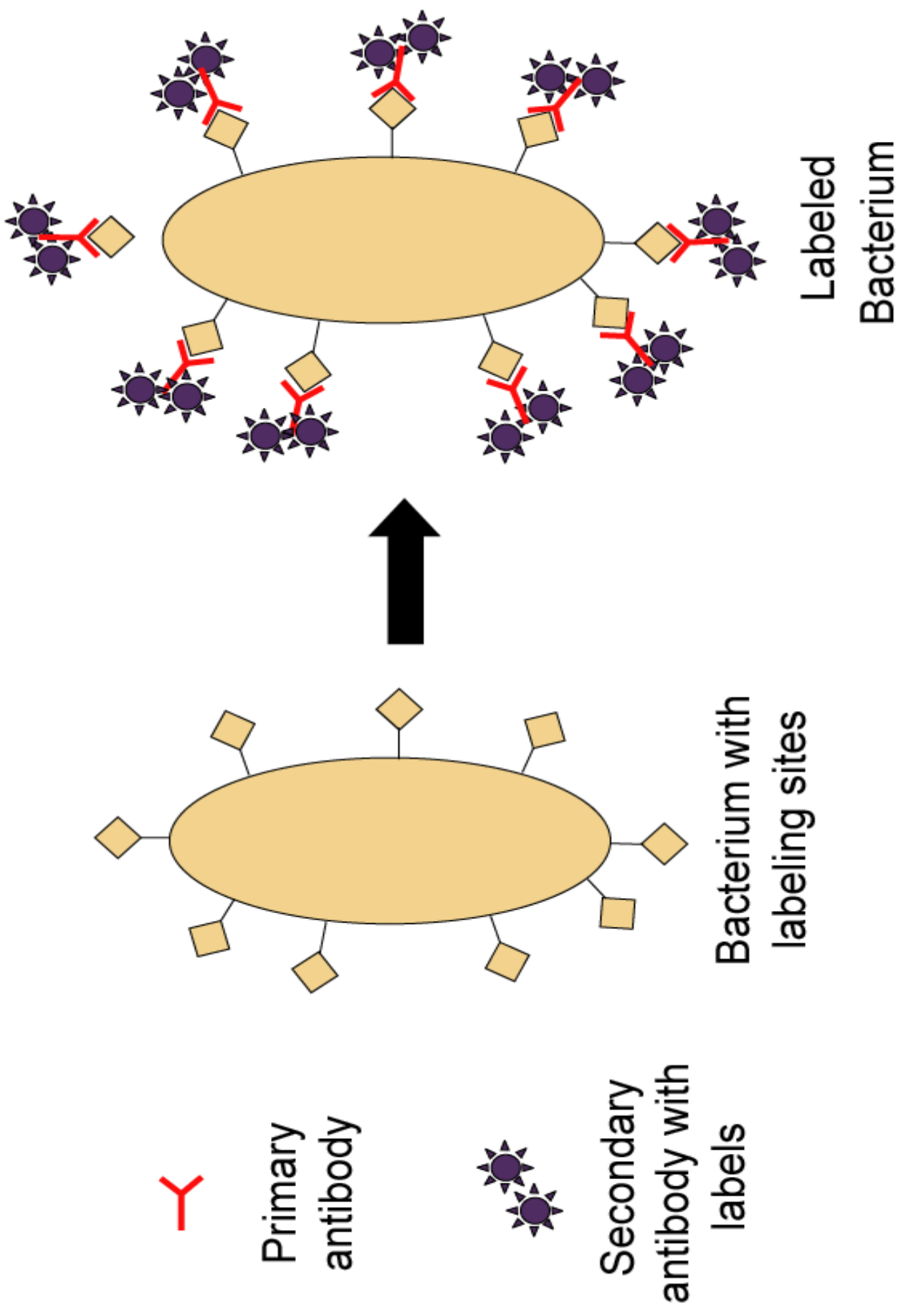
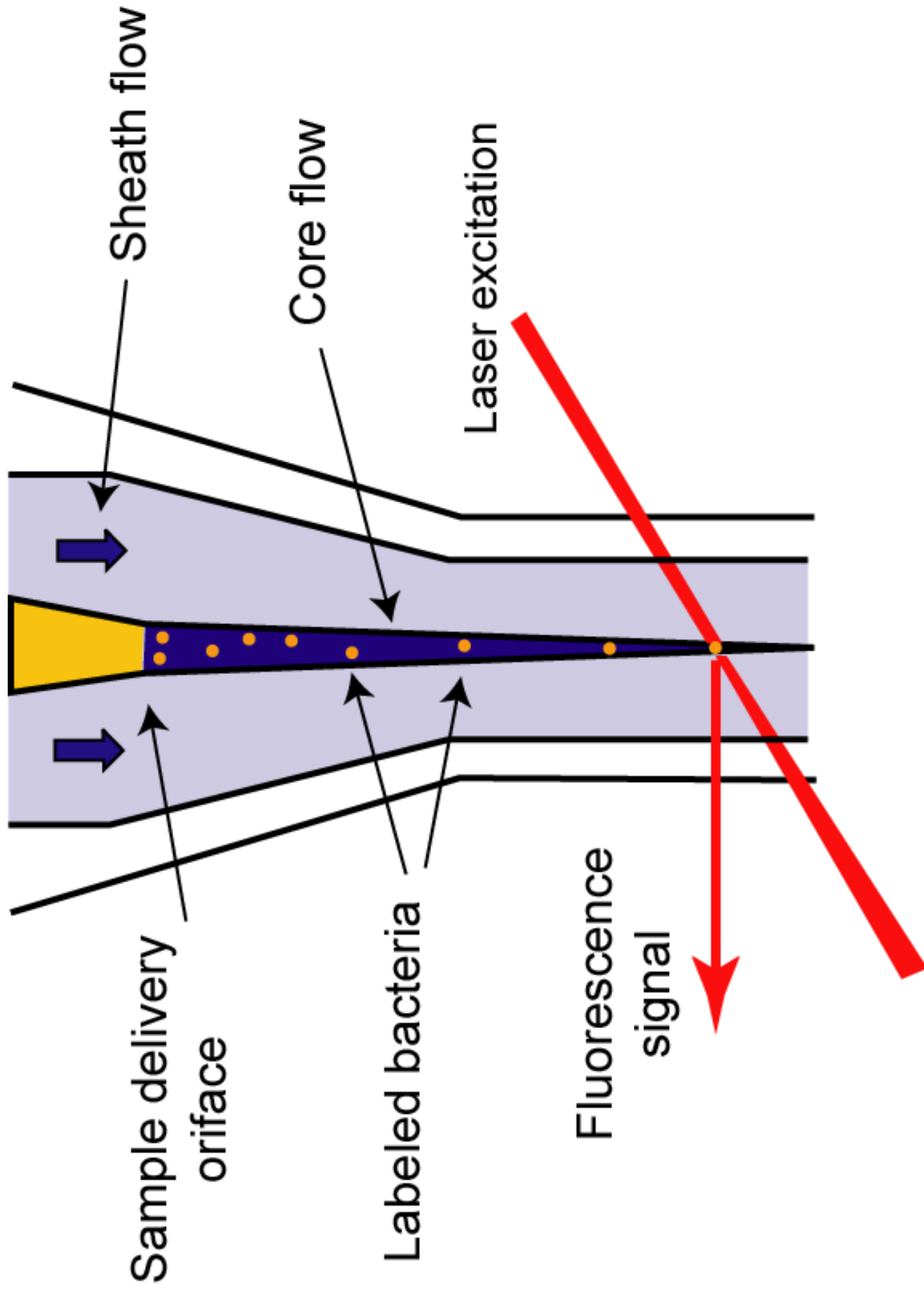


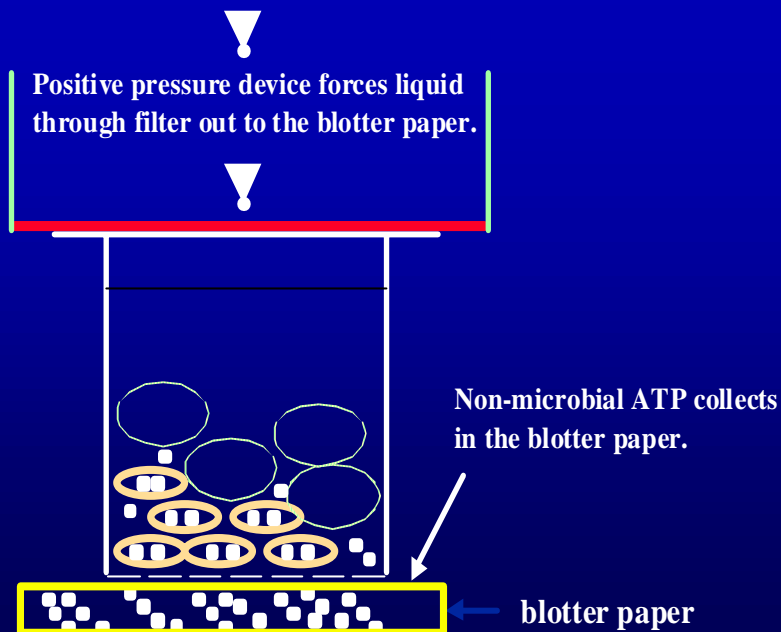
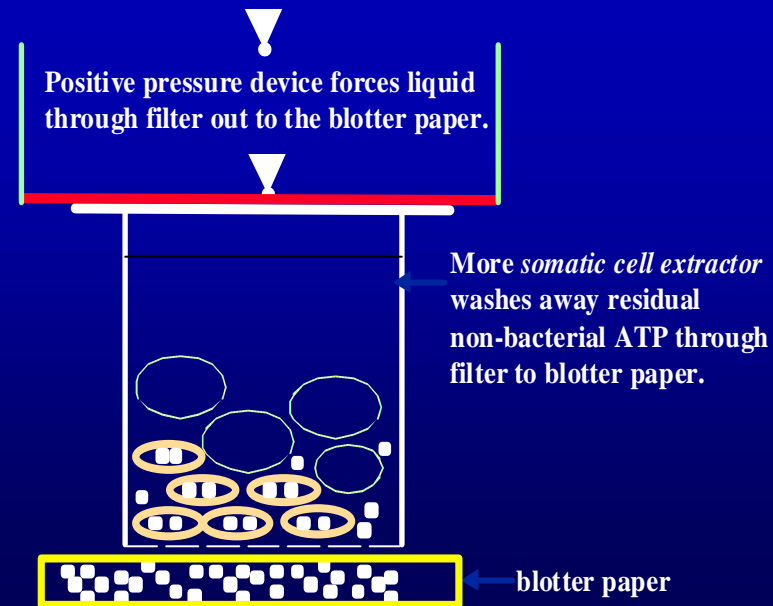
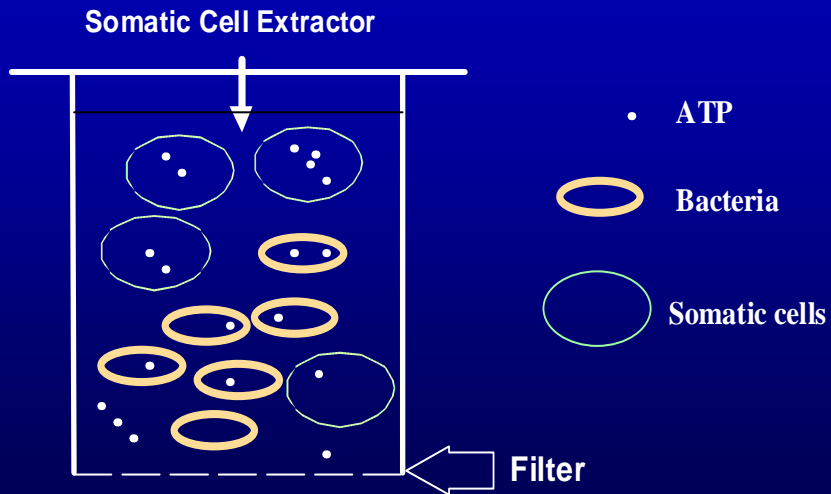
3 01.16



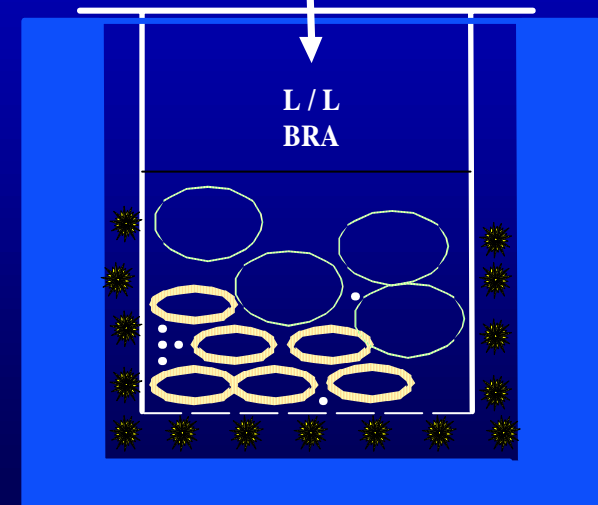




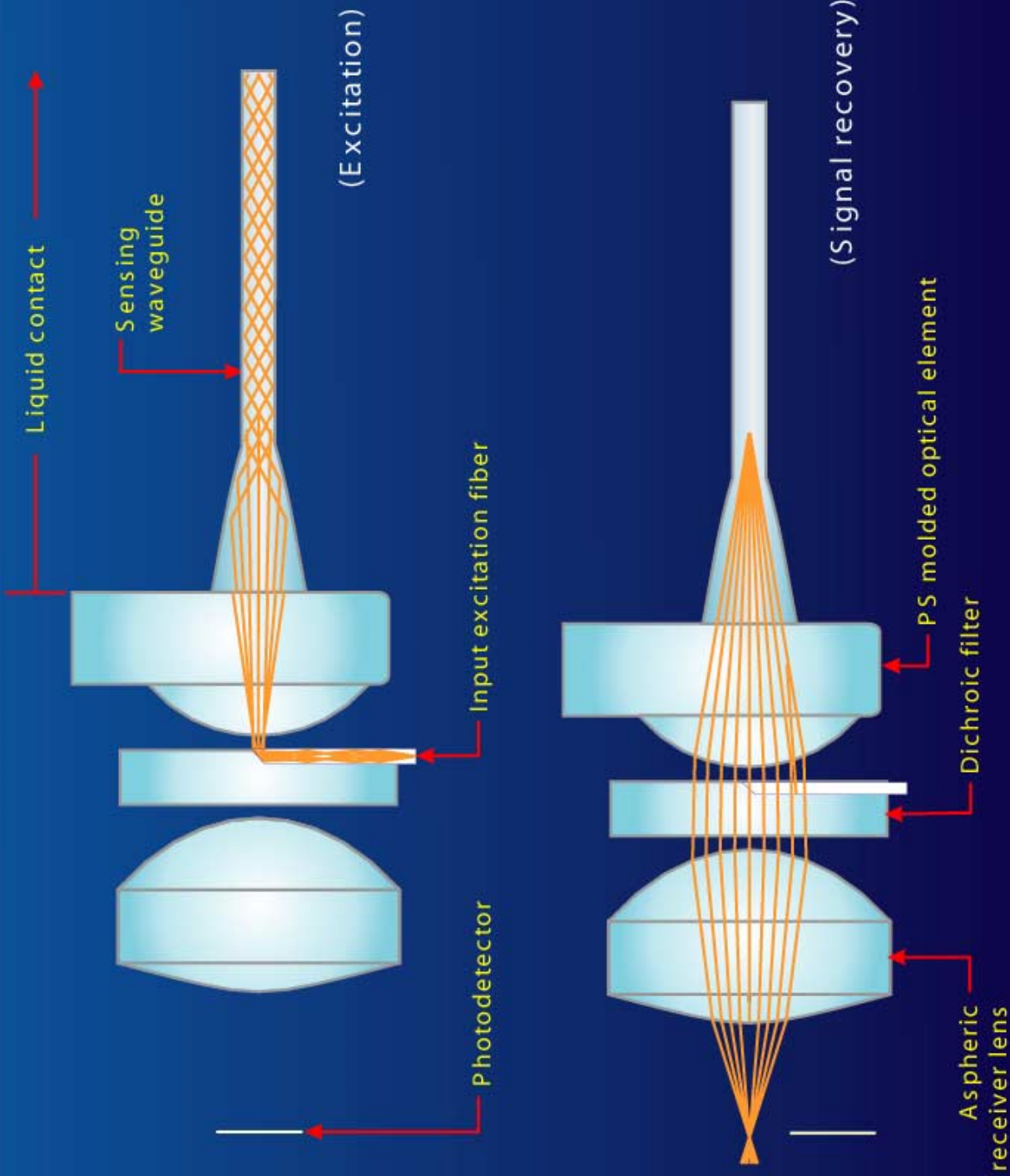
Adding somatic cell extractor releases somatic ATP.  
Bacterial ATP remains within the bacterial cell envelope.



Luciferin / Luciferase (L/L) preparation is added to  
Bacterial Releasing Agent,  
resulting in the emission of light from the completed L/L reaction.

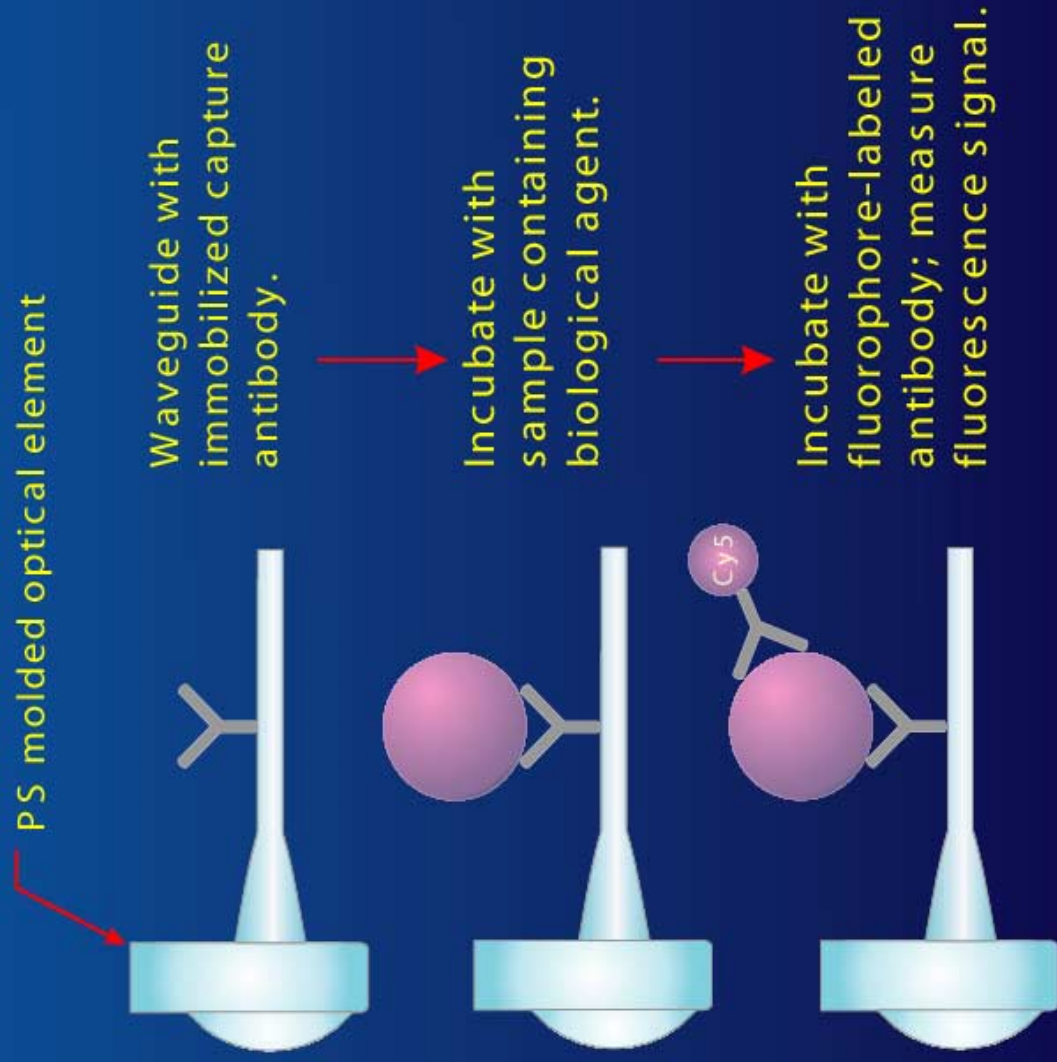


# INJECTION-MOLDED OPTICAL SENSOR ELEMENT

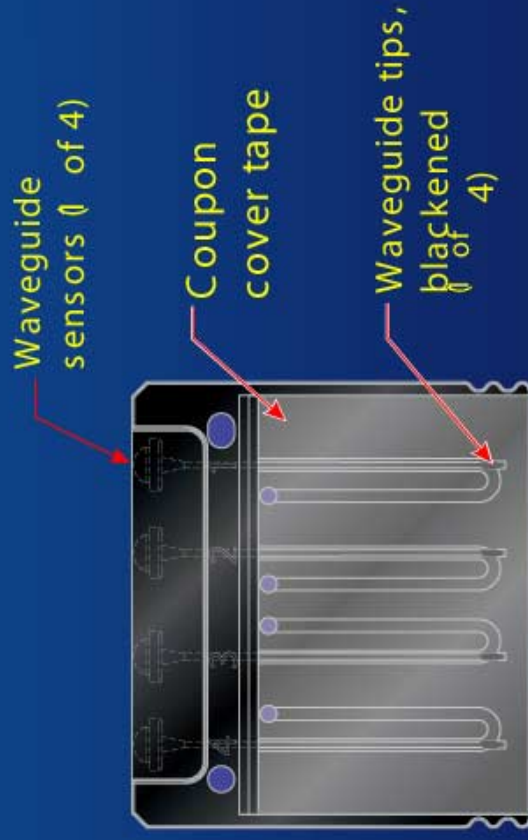




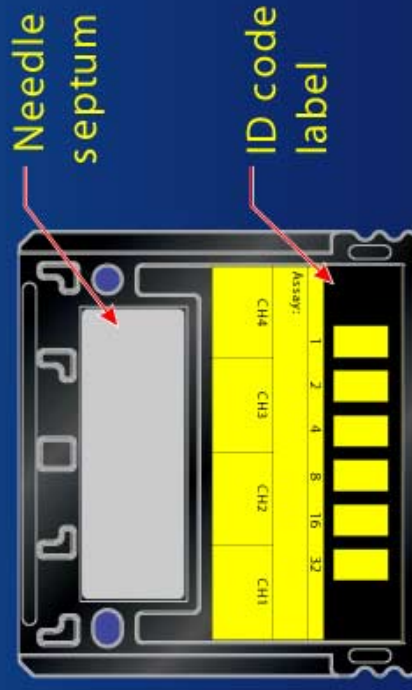
## STANDARD SANDWICH ASSAY FOR POLYSTYRENE WAVEGUIDE BIOSENSOR



# ASSAY COUPON



Top



Bottom

## Polymerization

R = Reporter  
Q = Quencher

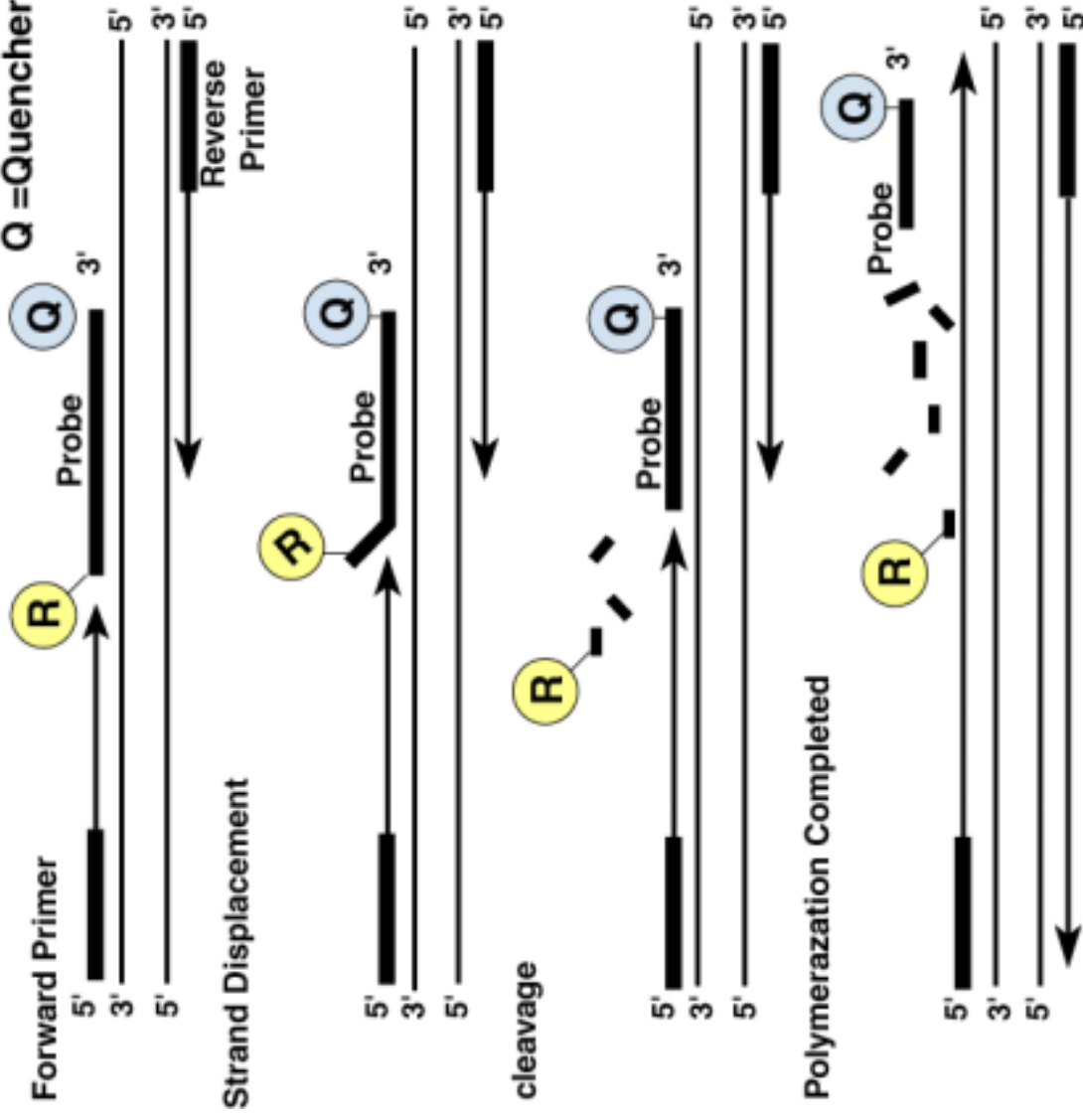
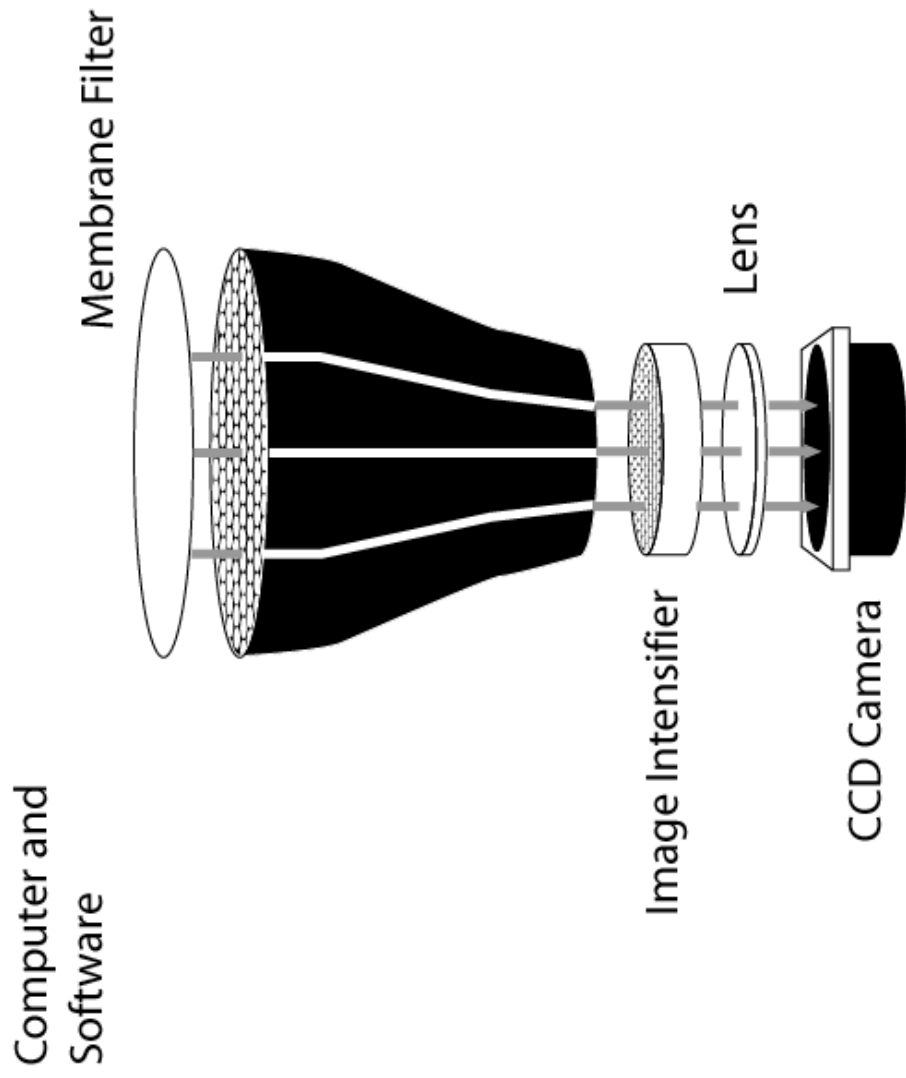
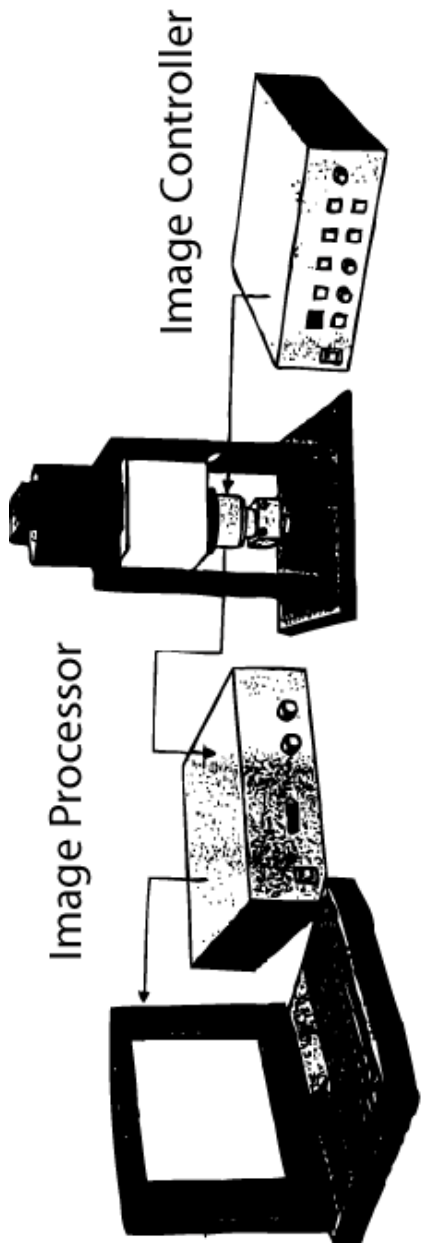


Figure 1. This figure was reproduced from the PE Applied Biosystems "TaqMan™ PCR Reagent Kit" protocol





# Advantages and Disadvantages of High-technology Methods for Rapid Measurement of Water Quality

Technology	Approach	Limit of Sensitivity	Viable Cells	Cost
Flow Cytometry	Antibodies	1	No	Medium
Bioluminometer	ATP	100 - 1000	Yes	Low
Fiber Optics	Antibodies	1000	No	Medium
Taqman	Molecular	1	No	Medium
CCD camera	ATP	1	Yes	High